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Characteristics of Changes in the Postnatal Ontogenesis of the Egg Path of Different Breeds

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Annotation: *The dynamics of changes in the linear dimensions of the right and left ovarian pathways of ewes of different age and karakul breed were studied, and it was found that the absolute indicators show specific changes during the physiological stages of postnatal ontogeny. Absolute lengths of the right and left ovarian pathways were observed to increase rapidly during the first 3 months of postnatal development, with peak peaks occurring at 18 and 36 months of age. Absolute rates of ovulation, especially after 18 months of age, have been reported to be slightly lower in karakul sheep than in ewes.*

Keywords: *karakul sheep, ewes, oviduct, postnatal ontogeny, absolute index, length, growth rate.*

Introduction . The oviduct, which is part of the female reproductive system, is the organ of fusion of female and male gametes, the anatomical structure of which manifests itself at various physiological stages of animal postnatal ontogeny. The study of the dynamics of changes in the anatomical structure of these organs in the postpartum period is of scientific and practical importance in the development and application of effective methods for early detection, prevention and treatment of various diseases observed in this organ.

S.G. Dolganova's research revealed that the epithelium of the oviduct and uterine mucosa of goats is single-layered, columnar, the appearance of the uterine glands at 6-7 months, the epithelial cells shrink after birth, the epithelial cells of the uterine glands and mucous membranes increase with age [3, 4, 5].

According to the author, the muscular layer of the oviduct, uterus and vagina thickens with age of the animal. A.M. Beloborodenko, T.A. Beloborodenko, M.A. In their research, Beloborodenko proved that when calves live in a state of hypodynamics, negative changes occur not only in the locomotor organs, but also in the genitals. When calves were kept in a state of hypodynamics for a long time, a significant delay in sexual maturation, destructive changes in the ovaries, swelling of the uterine mucosa, 228 delays in the readiness of other reproductive organs to hatch were noted [1].

T.S.Vodyanitskaya studied the developmental characteristics of the kidneys and ovaries of birds at different stages of their postnatal ontogenesis and determined the rapid growth of the kidneys at the stage of 1-29 days in connection with the growth of the organism of birds [2].

According to the author, the kidneys of one-day-old chicks differ from those of adult birds in terms of functional and structural structure. During the 15-day period, the kidney structures continue to form, and the area of the renal corpuscles, curved tubules and their pathways, the ratio of the epithelial cells of the tubules to the core-cytoplasm decreases. According to Yu.M.Malofeev and K.Tokaev, in the postpartum period of sheep there are rapid involutional changes in the uterine wall, which is aimed at faster preparation for the next pregnancy. On the 30th day after birth, complete recovery of the genitals is observed, but 10-15% of the uterus does not return to its original position [6].

Materials and methods. The research was carried out on the ovaries of karakul and wild sheep, which are kept on farms of Nurabad district of Samarkand region, belonging to the 3-day, 3, 6, 12, 18, 36-month stages of postnatal ontogeny. For sampling, clinically healthy and moderately obese animals belonging to the studied youth were selected. The egg tracks of karakul and jaydari sheep belonging to the relevant age groups were taken for the object of inspections. General morphological methods were used to determine the morphometric parameters of the oviduct. The research was carried out in the scientific laboratory of the Department of Animal Anatomy, Histology and Pathological Anatomy of the Samarkand Institute of Veterinary Medicine. All numerical data obtained as a result of scientific research were mathematically processed according to the method of K. Merkureva. The confidence level - r (R) was found on the Student table. A growth coefficient was calculated to determine the age-related dynamics of the oviduct. The growth coefficient was determined by dividing the length of the adult animal organ by the corresponding parameters of the young animal organ, and the entire investigated postnatal ontogenetic period was determined by a formula $K = \frac{Vt}{V0}$ developed by K.B. Svechin.

Mathematical-statistical analysis was performed on a computer's Microsoft excel spreadsheet using Student and Fisher criteria. Results and their analysis. It was observed that the absolute values of the length of the oviduct have a certain dynamics of change in the physiological stages after birth of the animal. The absolute measurement of the length of the left oviduct was 5.8 cm in 3-day-old lambs, and during the period up to the next 3 months it was 229, a sharp increase of 9.5 cm or 1.63 times the growth rate. This indicator of the left oviduct increased without significant deviations from the next 6-month stage of animal postnatal ontogeny, at 6 months - 11.2 cm, growth rate 1.17 times, at 12 months - 13.2 cm, growth rate 1.17 times, at 18 months - 15.3 cm, the coefficient of growth was 1.16 times. At the 36-month stage of postnatal development, this index of the left oviduct was at its highest level compared to the lower stages studied, i.e., its size was 16.0 cm and its growth rate was 1.06 times. The absolute value of left oviduct length was found to be 2.75 times the growth coefficient during the studied stages of animal postnatal ontogeny. The absolute rate of right ovarian length in Karakol sheep increased rapidly from 3 days to 3 months of postnatal development in proportion to the left ovarian pathway, reaching 5.9 cm to 9.4 cm, and the growth rate during this period was 1.59 times. In the later physiological stages of development, this size of the right oviduct increases without significant changes, ie at 6 months - 12.0 cm, growth rate - 1.27 times, at 12 months - 13.6 cm, growth rate - 1.13 times, at 18 months - 15.8 cm, the growth coefficient is 1.16 times. The absolute value of left ovarian tract length in ewes ranged from 5.6 cm to 9.8 cm from 3 days to 3 months of postnatal ontogeny, during which time the growth rate increased 1.75 times and this process was observed periodically in the later stages of development.

That is, the absolute length of the left oviduct is 12.3 cm at 6 months, the growth rate is 1.25 times, the growth rate is 13.8 cm at 12 months, the growth rate is 1.12 times, the growth rate is 15.7 cm at 18 months, the growth rate is 1, 14 times, at 36 months it reached 16.6 cm, and the growth rate reached 1.06

times. It was found that the growth rate of left ovarian tract length in ewes was 2.96 times from 3 days to 36 months of postnatal development. The absolute measurement of the length of the right oviduct was 5.4 cm in the 3-day stage of postnatal development of ewes, and in the next 3 months this figure was observed to increase to 9.2 cm, the growth rate to 1.7 times. This indicator of the right ovarian pathway is 12.8 cm in 6 months of postnatal development of animals, growth rate 1.39 times, 14.1 cm in 12 months, growth rate 1.1 times, 16.4 cm in 18 months, growth rate 1, 16 times, at 36 months 16.9 cm, and the growth rate was 1.03 times. The absolute coefficient of growth of the right oviduct length was observed to increase by 3.13 times in animals from 3 days to 36 months of age.

Conclusion: - the absolute values of the right and left pathways of karakul and jaydari sheep increase rapidly from 3 days to 3 months of postnatal ontogeny, regardless of their breed;

- the highest absolute values of the length of the oviduct of sheep are observed to correspond to the 18th and 36th stages of postnatal ontogeny;
- the absolute length of the right and left ovarian pathways is slightly higher than in karakul sheep, especially after 18 months of postnatal development.

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